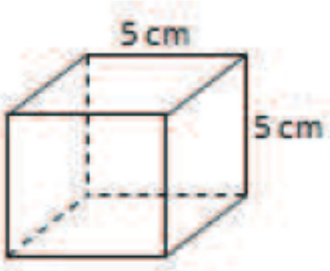
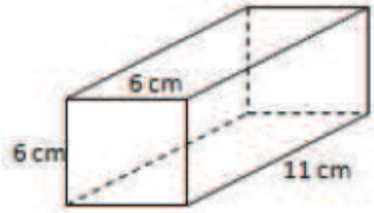
Surface Area and Volume Review **Name _____**

Find the surface area and volume of each solid. Indicate the formulas used, the values substituted into the formulas. Circle your final answer, including units.

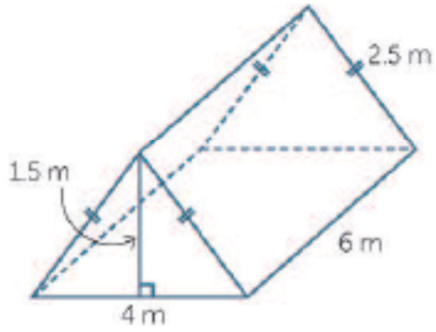
a)



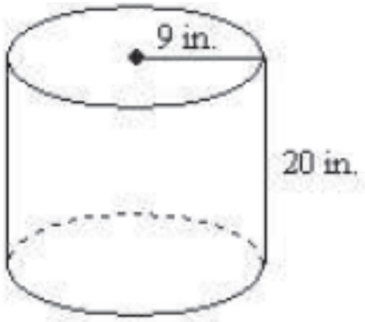
b)



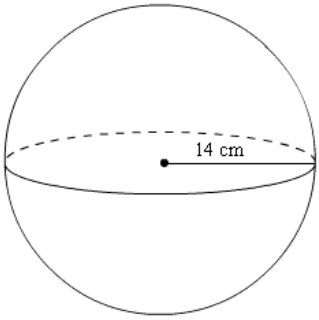
c)



d)



e)



What would we do to calculate the surface area of a hemisphere (half a sphere) with the same radius?

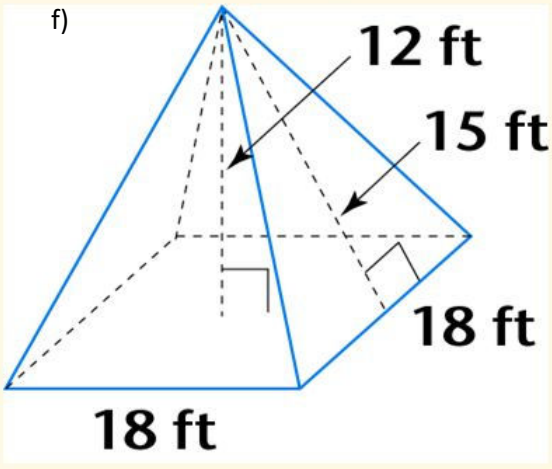
_____

_____

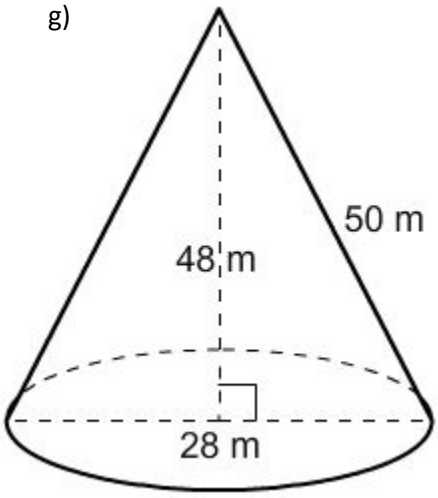
What would we do to calculate the volume of a hemisphere with the same radius? _____

_____

f)

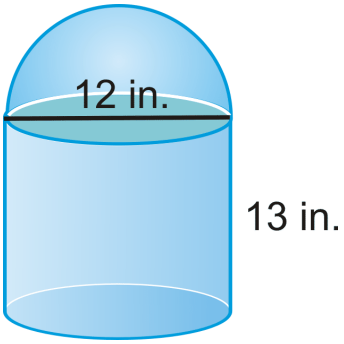


g)



h) This composite object is a hemisphere (half a sphere) attached to the top of a cylinder.

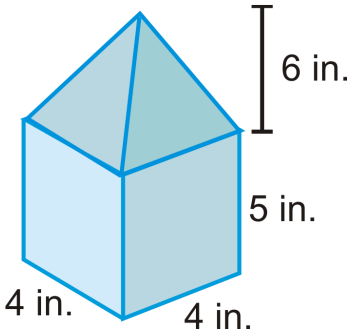
Calculate the total surface area and the volume of this composite object. Indicate the formulas. Substitute the values into the formula. Simplify. Calculate the total. Don't forget overlapping surfaces are **not** included when calculate surface area. **Indicate final answer circled, including units**.



i) This shape is a square-based pyramid attached to the top of a rectangular prism.

Calculate the total surface area and the volume of this composite object. Indicate the formulas. Substitute the values into the formula. Simplify. Calculate the total. Don't forget overlapping surfaces are **not** included when calculate surface area. **Indicate final answer circled, including units**.

Height of triangle: 3 in.



a) 150 cm² 125cm³ b) 336 cm² 396 cm³ c) 60 m² 36 m³ d) 512 in² 5 089.4 in³ e) 2 463.0 cm² 11 494 cm³ f) 864 ft² 1296 ft³ g) 10 053.1 m² 9 852.0 m³ h) 829.4 in² 1922.7 in³ i) 120 m² 128 in³